REMARKS

The claims are claims 1 to 10.

The application has been amended at many locations to correct minor errors and to present uniform language throughout. The amendments include correction of those errors noted by the Examiner.

Replacement drawings including the changes required by the Examiner are enclosed.

Claims 1, 2, 5 and 7 to 10 are amended. These amendments correct errors noted by the Examiner.

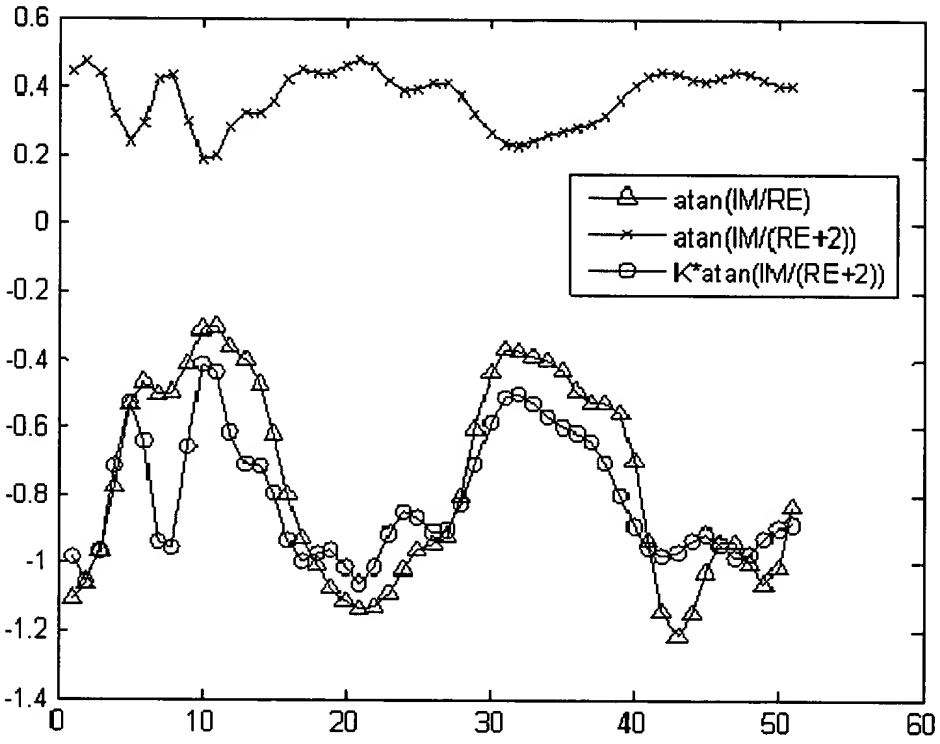
Claims 1 to 10 were rejected under 35 U.S.C. 101 as inoperative and therefore lacking utility. The OFFICE ACTION states that the presents "a method for computing the value of arctangent (IM/RL) and 7*arctangent (IM/(RL+2)) in all the values of IM in [-1,1], and RL in [-1,1]." The OFFICE ACTION includes several graphs supposedly applying the recited method and showing inoperability.

The graphs presented by the Examiner employ an incorrect assumption that invalidates them. The first graph in the OFFICE ACTION is "for the case where IM=1 and RL from -1 to 1." The second graph is "for a value of IM=0.1." This assumption of a fixed IM value for variable RL values is incorrect. As taught in the application RL is the real part and IM is the imaginary part of the FM phase vector. Thus the IM imaginary part is not independent of the RL real part. A MathLab plot of this method on a sample FM signal is given below. The MathLab script is:

```
> A1 = atan(Q./I);
> A2 = atan(Q ./ (I+2));
> figure;
> plot(A1);          % Blue
```

```
> hold on;
> plot(A2,'r');      % Red
> plot(A2 .* -3.2 , 'k');      % Black
```

This plot has been marked with triangle, X and circles as shown in the legend to show this subject matter in a black and white print out.



This corresponds substantially to the graphs of Figures 5 and 6 of this application. Note further that the claims do not recite that the factor K is 7. Instead this application teaches how to determine the factor K at page 13, lines 3 to 8. The above example is plotted with a factor K of -3.2.

In view of this explanation, the Applicant respectfully submits this application is operable and has utility. Therefore, claims 1 to 10 are proper under 35 U.S.C. 101.

The Applicant respectfully submits that all the present claims are allowable for the reasons set forth above. Therefore early reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicant requests that the Examiner contact Applicant's attorney at the below listed telephone number and address to facilitate prosecution.

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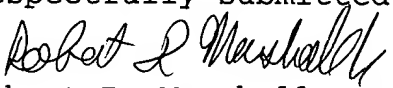
Respectfully submitted,



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